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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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AKERMAN SENTERFITT P. O. BOX 3188 WEST PALM BEACH, FL 33402-3188			EXAMINER WAI, ERIC CHARLES	
			ART UNIT 2195	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/666,307

Applicant(s)

CREAMER ET AL.

Examiner

Eric C. Wai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>02/09/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-35 are presented for examination.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 4-6, 8, 12-19, 22-24, 26, and 31-35 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-7, 10-13, 16-26, and 29-31 of copending Application No. 10/665,585.

4. Although the conflicting claims are not identical, they are not patentably distinct from each other. For example, claims 1 and 4 teach a method for associated a ghost agent, replicating the agent, recording data, moving said host, and generating test input.

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These steps are the same and obvious as the steps of claims 1,3, and 4 of copending Application No. 10/655,585. The examiner can ascertain no difference between the claims of the present application and that of copending Application No. 10/665,585. It is noted that the minor difference encompass replacement of the recitation of the limitations in the claims and it appears to be substantially the same or duplication or in some instance obvious over one another.

5. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1, 4-8, 11-14, 16-18, 19, 22-26, 29-32, and 34-35, are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 10-14,16-17, 20, and 26-30 of copending Application No. 10/665,586.

7. Although the conflicting claims are not identical, they are not patentably distinct from each other. For example, claim 1 of copending Application No. 10/655,586 performs all the steps of claim 1 of the present application, with the addition of receiving a problem indication and responding to the problem. It would have been obvious to remove the step of receiving a problem indication and responding to the problem to broaden the scope of the claim.

8. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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9. Claims 1-4, 7-11, 16-18, 19-22, 25-29, and 34-35, are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 6-9, 14-19, and 22-26 of copending Application No. 10/666,309.

10. Although the conflicting claims are not identical, they are not patentably distinct from each other. For example, claim 1 teaches all the same steps, with obvious modifications to the claim language, as claim 1 of copending Application No. 10/666,309. The examiner can ascertain no difference between the claims of the present application and that of copending Application No. 10/666,309.

11. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claims 1, 4, 7-8, 11, 16-18, 19, 22, 25-26, 29, and 34-35, are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 7-11, 13-17, 18-20, 24, and 26-29 of copending Application No. 10/665,582.

13. Although the conflicting claims are not identical, they are not patentably distinct from each other. For example, claim 1 teaches associating a ghost agent with a host, while claim 1 of copending Application No. 10/665,582 teaches associated a software object with a host software object. It would have been obvious that a ghost agent is equivalent to a software object. The examiner can ascertain no difference between the claims of the present application and that of copending Application No. 10/665,582.

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14. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

15. Claims 1, 4-5, 7-8, 11, 16-18, 19, 22-23, 25-26, 29, and 34-35, are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 8-11, 13, 18-23, 25, 29-34, and 40 of copending Application No. 10/666,350.

16. Although the conflicting claims are not identical, they are not patentably distinct from each other. For example, claims 1, and 5-6 teach generating test input and test results using an associated ghost agent with a host. These are the same steps as taught by claims 1-2 of copending Application No. 10/666,350. The examiner can ascertain no difference between the claims of the present application and that of copending Application No. 10/666,350.

17. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

18. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

19. Claims 8-18, and 26-35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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20. Claims 8-15, 26-33, and 35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or a useful, concrete and tangible result. No physical transformation is recited and additionally, the final result of the claim is determining operational metrics for the transaction which is not a tangible result. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf>

21. Claims 16-18, and 34-35 are rejected because the claimed invention, appearing to be comprised of software alone without claiming associated computer hardware required for execution, is not supported by either a specific and substantial asserted utility (i.e., transformation of data) or a well established utility (i.e. a practical application).

Claim Rejections - 35 USC § 112

22. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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23. Claims 1-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following claim language is not clearly understood:

- i. Claims 1, 19, and 34 recite in line 6, "determining operation metrics for at least a portion of said replicated actions". It is unclear how this determining takes place and upon which portion the operation metrics are determined for. Line 8 recites, "moving said host". It is unclear whether this 'moving' is performed based on the operational metrics or if it is performed all the time. Line 9 recites, "responsively moving said ghost agent in accordance with movement of said host". It is unclear whether the agent remains coupled with the host during all moves or if the agent simply moves when the host moves.
- ii. Claims 5 and 23 recite, "generating test input". It is unclear how this step of generating is connected to the rest of the method (i.e. what is the purpose of the test input?).
- iii. Claims 6 and 24 in line 3 recite, "deploying at least one ghost agent". It is unclear whether the step of deploying is the same or different than the step of "responsively moving" in claim 1. Furthermore, it is unclear whether there are multiple ghost agents available since claim 1 mentions 'ghost agent' in the singular. Line 5 recites, "recording

operational metrics relating to tests". It is unclear whether these tests are performed based on the test input of claim 5.

iv. Claims 8, 26 and 35 in line 3 recite, "executing said actions within different locations of a grid environment". It is unclear whether these actions are performed multiple times in different locations or different actions among the transaction are distributed among the grid. Line 4 recites, "replicating said actions". It is unclear whether these replicated actions are also executed. Line 6 recites, "determining operational metrics". It is unclear how this performed based on the recorded data.

v. Claim 16 line 3 recites, "a ghost log". It is unclear how this relates to the rest of the system (i.e. what is its purpose?).

vi. Claim 17 recites, "a ghost identifier". It is unclear how this relates to the rest of the system (i.e. what is its purpose?).

Claim Rejections - 35 USC § 102

24. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

25. Claims 8-10, 26-28, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Boukobza et al. (US Pat No. 6,122,664 hereinafter Boukobza).

26. Regarding claim 8, Boukobza teaches a method for determining operational metrics comprising the steps of:

identifying a transaction comprising a plurality of actions (col 2 lines 13-19, wherein the execution of an application is performed on multiple nodes);

executing said actions within different locations of a grid environment (col 2 lines 13-19, wherein the execution of an application is performed on multiple nodes);

replicating said actions within at least one ghost agent (col 5 lines 13-18);

recording data relating to said replicated actions (col 6 lines 30-34); and,

determining operational metrics for said transaction based upon said recorded data (col 5 lines 23-29).

27. Regarding claims 9-10, Boukobza teaches that the operational metrics comprise performance metrics or load metrics (col 2 lines 46-55).

28. Regarding claims 26-28, they are machine-readable storage claims of claims 8-10 above. Therefore they are rejected for the same reasons as claims 8-10 above.

29. Regarding claim 35, it is the system claim of claim 8 above. Therefore it is rejected for the same reasons as claim 8 above.

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. Claims 11-15, and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boukobza et al. (US Pat No. 6,122,664).

32. Regarding claim 11, Boukobza does not explicitly teach that different locations exist within different grids of said grid environment. However, it would have been obvious to one of ordinary skill in the art at the time of the invention, that the nodes of Boukobza's system, could be placed in different grids. One would be motivated by the desire to gather operational metrics from different areas.

33. Regarding claims 12-15, Boukobza does not teach executing said actions within a production or test segment of said grid environment, wherein said transaction is executed for an application, said determining step further comprising the step of: determining said operational metrics while actions for different applications are being executed within said production or test segment.

34. It would have been obvious to one of ordinary skill in the art at the time of the invention to include running a transaction in a production or test segment and determining operational metrics for the transactions. One would be motivated by the

desire to first perform the method of Boukobza first in a testing environment to test for errors and migrate the system to a production environment once it is ready to go online.

35. Regarding claims 29-33, they are machine-readable storage claims of claims 11-15 above. Therefore they are rejected for the same reasons as claims 11-15 above.

36. Claims 1-7, 16-25, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boukobza et al. (US Pat No. 6,122,664) in view of Putzolu et al. (US Pat No. 6,681,243, hereinafter Putzolu).

37. Regarding claim 1, Boukobza teaches a method for gathering operational metrics comprising the steps of:

identifying a host within a grid environment, wherein said host is a software object (col 2 lines 20-37);

associating a ghost agent with said host (col 2 lines 29-31, wherein each agent comprises a plurality of specific modules specific to the different object type or to a particular domain);

replicating actions of said host within said ghost agent (col 6 lines 30-34; wherein log files or the actions of each node are monitored);

determining operational metrics for at least a portion of said replicated actions (col 2 lines 52-55);

recording said operational metrics (col 5 lines 23-25).

38. Boukobza does not explicitly disclose moving said host within said grid environment and responsively moving said ghost agent in accordance with movement of said host.

39. Putzolu teaches moving said host within said grid environment and moving said ghost agent in accordance with movement of said host (col 3 lines 59-61, col 4 lines 17-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to move the host within the grid environment and moving said ghost agent in accordance with movement of said host in order to allow for easier and more effective management of a network as taught by Putzolu (col 3 lines 48-54).

40. Regarding claims 2-3, Boukobza teaches that the operational metrics comprise performance metrics or load metrics (col 2 lines 46-55).

41. Regarding claim 4, Boukobza teaches identifying a location for logging data that is external to said ghost agent; and, conveying said recorded operational metrics to said identified location (col 6 lines 30-34; wherein log files or the actions of each node are monitored).

42. Regarding claim 5, Boukobza teaches generating test input based in part upon said recorded operational metrics (col 3 lines 30-39).

43. Regarding claim 6, Boukobza and Putzolu do not explicitly teach that said ghost agent is deployed within a production segment of said grid environment, said method further comprising the steps of:

deploying at least one ghost agent within a test segment of said grid environment; and,

recording operational metrics relating to tests conducted within said test segment using said deployed ghost agents.

44. However, it would have been obvious to one of ordinary skill in the art at the time of the invention, to deploy a ghost agent in a test environment and record operation metrics. One would be motivated to perform testing on a software object in a testing platform to test for bugs and errors.

45. Regarding claim 7, Boukobza teaches: selecting a plurality of hosts; and, for each selected host, repeating said associating step, said replicating step, and said recording step (col 4 line 36 to col 5 line 17).

46. Regarding claim 16, Boukobza teaches a ghost agent as claimed according to claim 1.

47. Regarding claim 17, Boukobza teaches a ghost identifier configured to identify said ghost agent to components within said grid environment (col 5 lines 13-17).

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48. Regarding claim 18, Putzolu teaches:

means for disassociating said ghost agent from said host; and,

means for associating said ghost agent with a different host (col3 lines 59-61).

49. Regarding claims 19-25, they are machine-readable storage claims of claims 1-7 above. Therefore they are rejected for the same reasons as claims 1-7 above.

50. Regarding claim 34, it is the system claim of claim 1 above. Therefore it is rejected for the same reasons as claim 1 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric C. Wai whose telephone number is 571-270-1012. The examiner can normally be reached on Mon-Thurs, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng - Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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